Practice: 511 - Forage Harvest Management

Scenario: #1 - Improved Forage Quality

Scenario Description:

Improved cultural practices and recordkeeping result in better forage quality and better livestock performance.

Before Situation:

Forage cutting heights are as close to the ground as equipment will allow resulting in very low stubble height. Plant regrowth is very slow. Forage quality tests are not regularly done. Records of forage quality components, cutting heights, moisture content, and harvest schedule are not regularly kept.

After Situation:

Forage cutting heights are raised to leave at least 3-4" stubble height for cool season grasses and 6-8" (use a boot on the mower) for warm season grasses. Increased residual forage results in much faster plant regrowth. Forage quality tests are submitted to an accredited lab for analysis. Records of forage quality components, cutting heights, moisture content, and harvest schedule are regularly kept to track increased forage quality and improved livestock performance.

Scenario Feature Measure: Improved Relative Feed Value

Scenario Unit: Acre

Scenario Typical Size: 30

Scenario Cost: \$265.76 Scenario Cost/Unit: \$8.86

Cost Details (by categor	y):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
	297				100	
Acquisition of Technical Kno	wledge					
Training, Workshops		Educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants.	Each	\$41.42	1	\$41.42
Training, Registration Costs	296	Conference Registration Fees	Each	\$133.62	1	\$133.62
Labor						
Skilled Labor		Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc	Hour	\$40.66	1	\$40.66
Materials						
Test, Plant Tissue Test		Tissue analysis for crops. Includes materials and shipping only.	Each	\$25.03	2	\$50.06

Practice: 511 - Forage Harvest Management Scenario: #2 - Organic Preemptive Harvest

Scenario Description:

Preemptive harvest of forage crops to prevent damage from insects (such as leafhopper on alfalfa) or other pests results in better forage quality and better livestock performance.

Before Situation:

Forage pests are usually not controlled leading to degraded plant resources and increased runoff.

After Situation:

In organic or transitioning to organic systems, forage pests are controlled by executing a preemptive harvest before pests can damage forage quality. Forage yields are reduced because of immature stage of forage growth. Forage tests are submitted to an accredited lab for analysis. Records of forage quality components are used to adjust feeding rations.

Scenario Feature Measure: Relative Feed Value Maintained

Scenario Unit: Acre

Scenario Typical Size: 30

Scenario Cost: \$313.16 Scenario Cost/Unit: \$10.44

Cost Details (by category):								
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost		
	297				100			
Acquisition of Technical Know	wledge							
Training, Registration Costs	296	Conference Registration Fees	Each	\$133.62	1	\$133.62		
Training, Workshops	294	Educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants.	Each	\$41.42	1	\$41.42		
Foregone Income								
FI, Grazing AUMs	2079	Grazing is the Primary Land Use	AUM	\$15.29	3.1	\$47.40		
Labor								
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$40.66	1	\$40.66		
Materials								
Test, Plant Tissue Test	301	Tissue analysis for crops. Includes materials and shipping only.	Each	\$25.03	2	\$50.06		

Practice: 511 - Forage Harvest Management

Scenario: #3 - Perennial Crops - Delayed Mowing

Scenario Description:

In perennial forage crops, the delaying the harvest of the first cutting to promote the reproduction of ground nesting birds. Delaying the harvest of the first cutting will benefit ground nesting birds; research at the University of Vermont showed that breeding success for declining grassland songbirds (e.g. Bobolink) went from 0 on a regularly harvested hay field to 2.8 fledglings per female per year when the the first harvest on a hayfield was delayed until August 1st. Bobolinks, Eastern Meadowlarks, and Savannah Sparrows require a nesting period to fledge young that lasts through the end of July in most parts of the eastern US. The delayed harvest results in a decrease in overall forage quality. Farmers could see as much as a 50% reduction in market value due to declines in protein (~50%) and digestibility (~20%), making the forage crop less palatable and lower in relative feed value. The selected fields should be large enough to promote ground nesting birds. After young have fledged the field will be harvested for dry forages.

Before Situation:

Perennial forage crops are produced and harvested; ground nesting birds are disturbed and/or fledgling birds are killed in the process.

After Situation:

Annual crops are harvested with a delayed mowing; forage quality is compromised, however, the survival of ground nesting birds is promoted.

Scenario Feature Measure: Increased grassland bird populations.

Scenario Unit: Acre

Scenario Typical Size: 30

Scenario Cost: \$360.56 Scenario Cost/Unit: \$12.02

Cost Details (by category): **Price Component Name Component Description** Unit **Quantity Cost** (\$/unit) 100 297 Acquisition of Technical Knowledge \$41.42 Training, Workshops 294 Educational seminar or series of meetings emphasizing Each \$41.42 interaction and exchange of information among a usually small number of participants. Training, Registration Costs 296 Conference Registration Fees Each \$133.62 1 \$133.62 Foregone Income 2079 Grazing is the Primary Land Use AUM \$15.29 6.2 \$94.80 FI, Grazing AUMs Labor Skilled Labor 230 Labor requiring a high level skill set: Includes carpenters, Hour \$40.66 1 \$40.66 welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc. Materials Test, Plant Tissue Test \$25.03 2 \$50.06 301 Tissue analysis for crops. Includes materials and shipping Each only.